What is claimed is:

1. A method of improving data transfer in a virtual network, comprising steps of:

allocating one or more outbound packing buffers for each of a plurality of particular network addresses;

packing outbound data packets into appropriate ones of the outbound packing buffers, according to a network address within a header of each outbound data packet; and

transmitting each outbound packing buffer onto the virtual network in a single transmission operation.

2. The method according to Claim 1, wherein each of the particular network addresses is a next-hop address on the virtual network.

3. The method according to Claim 1, wherein the network address within the header is a next-hop address inserted into the header by a sending host.

4. The method according to Claim 1, wherein the virtual network is defined by a plurality of logical partitions within a single computing device.

5. A method of improving data transfer in a virtual network, comprising steps of:

allocating one or more outbound packing buffers for each of a plurality of first network addresses, wherein each outbound packing buffer is logically divided into a plurality of frames, the frames being associated with second network addresses;

packing outbound data packets into selected frames of selected ones of the outbound packing buffers, when a header of the outbound data packet to be packed specifies the first network address and the second network address which correspond to the selected outbound packing buffer and the selected frame; and

transmitting each outbound packing buffer onto the virtual network in a single transmission operation.

6. The method according to Claim 5, wherein the first network address comprises a next-hop address on the virtual network and the second network address comprises a final destination address.

7. The method according to Claim 5, further comprising the steps of:

receiving a set of frames from the transmitting step; and

determining whether to forward the outbound data packets which are packed in each frame by inspecting a first packet of the frame.

8. A system for improving data transfer in a virtual network, comprising:

means for allocating one or more outbound packing buffers for each of a plurality of particular network addresses;

means for packing outbound data packets into appropriate ones of the outbound packing buffers, according to a network address within a header of each outbound data packet; and

means for transmitting each outbound packing buffer onto the virtual network in a single

transmission operation.

9. The system according to Claim 8, wherein each of the particular network addresses is a next-hop address on the virtual network and the network address within the header is a next-hop address inserted into the header by a sending host.

10. The system according to Claim 8, wherein the virtual network is defined by a plurality of logical partitions within a single computing device.

11. A system for improving data transfer in a virtual network, comprising:

means for allocating one or more outbound packing buffers for each of a plurality of first network addresses, wherein each outbound packing buffer is logically divided into a plurality of frames, the frames being associated with second network addresses;

means for packing outbound data packets into selected frames of selected ones of the outbound packing buffers, when a header of the outbound data packet to be packed specifies the first network address and the second network address which correspond to the selected outbound packing buffer and the selected frame; and

means for transmitting each outbound packing buffer onto the virtual network in a single transmission operation.

12. The system according to Claim 11, wherein the first network address comprises a next-hop address on the virtual network and the second network address comprises a final destination

address.

13. The system according to Claim 11, further comprising:

means for receiving a set of frames from the transmission; and

means for determining whether to forward the outbound data packets which are packed in each frame by inspecting a first packet of the frame.

14. A computer program product for improving data transfer in a virtual network, the computer program product embodied on one or more computer readable media and comprising:

computer readable program code means for allocating one or more outbound packing buffers for each of a plurality of particular network addresses;

computer readable program code means for packing outbound data packets into appropriate ones of the outbound packing buffers, according to a network address within a header of each outbound data packet; and

computer readable program code means for transmitting each outbound packing buffer onto the virtual network in a single transmission operation.

15. The computer program product according to Claim 14, wherein each of the particular network addresses is a next-hop address on the virtual network and the network address within the header is a next-hop address inserted into the header by a sending host.

16. The computer program product according to Claim 14, wherein the virtual network is

defined by a plurality of logical partitions within a single computing device.

17. A computer program product for improving data transfer in a virtual network, the computer program product embodied on one or more computer readable media and comprising:

computer readable program code means for allocating one or more outbound packing buffers for each of a plurality of first network addresses, wherein each outbound packing buffer is logically divided into a plurality of frames, the frames being associated with second network addresses;

computer readable program code means for packing outbound data packets into selected frames of selected ones of the outbound packing buffers, when a header of the outbound data packet to be packed specifies the first network address and the second network address which correspond to the selected outbound packing buffer and the selected frame; and

computer readable program code means for transmitting each outbound packing buffer onto the virtual network in a single transmission operation.

18. The computer program product according to Claim 17, wherein the first network address comprises a next-hop address on the virtual network and the second network address comprises a final destination address.

19. The computer program product according to Claim 17, further comprising:

computer readable program code means for receiving a set of frames from the transmission; and

computer readable program code means for determining whether to forward the outbound data packets which are packed in each frame by inspecting a first packet of the frame.